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ABSTRACT

The study hypothesized that scatter analysis of the three subtest scale scores on the Meeting Street School Screening Test (gross motor patterning, visual-perceptual-motor, and language) given at the beginning of first grade would prove to be a more accurate predictor of future placement in a learning disabilities program than the cut-off total raw score recommended in the test manual. Entering first-graders (N=1377) were administered the test; those placed in special programs were later identified as fourth- and fifth-graders. The hypothesis was not supported. Use of subtest scatter predicted learning disability placement less accurately than chance. The suggested cut-off identified 90% of children who were later placed in any special education program, but did not discriminate between learning disabled children and those with mental or emotional handicaps. (Author/JW)

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Early Identification of Learning Disabilities Using the Meeting Street School Screening Test

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Running Head: EARLY IDENTIFICATION

Abstract

The subscales of the Meeting Street School Screening Test are representative of some current theories suggesting poor spatial and gross motor, visual-perceptual-motor, or language skills as the basis for commonalities among learning disabled groups. In this study, poor performance on any one of these subscales relative to a child's average performance was expected to indicate a learning problem. Analysis of patterns of performance on the subscales of the test was expected to be a more accurate predictor than the cut-off score recommended in the test manual. Thirteen hundred and seventy-seven children were administered the test as entering first graders; those placed in special programs were later identified as fourth and fifth graders. The hypothesis was not supported. Use of subtest scatter predicted learning disability placements less accurately than chance. The suggested cut-off identified 90% of children later but misidentified 51% of the sample. The cut-off score did not discriminate between those placed in learning disability programs and those in other special education programs.

Early Identification of Learning Disabilities Using the Meeting Street School Screening Test

Early identification may be the most crucial factor in a learning disabled child's eventual success in school (Keogh, 1977). Early identification can prevent or lessen the frustration felt by many children with learning problems before academic failure become a self-fulfilling prophecy. This can only be accomplished when early identification leads to accurate individual programming. Identification which leads to varied remedial methods is of great value, while identification without clear implications for educational programs may not serve a useful purpose. In order for early identification to be valuable it must be meaningful for program planning and theoretically relevant.

Atheoretical screening for learning problems often yields nothing more than a large group of children who have acquired the label "at risk for educational failure." Such screening tells educators little about the nature of learning disabilities and even less about program planning. Some authors have noted the dangers of early identification for this reason; they cite the general lack of theoretical or strong empirical bases for many assessment devices used in this area (Jarman, 1978; Keogh, 1977).

Even when there is a theoretical base for a particular screening test, often there is little evidence for its predictive validity and practical use. Those efforts which do attempt to relate theory to

predictive validity are often limited. Too often the only tests of theories are made by the theorists themselves. Independent efforts are needed to empirically test the predictive validity of screening tests with hypotheses derived from theory.

The current federal definition of learning disability defines the condition as much by exclusion of other handicaps as it does inclusion of characteristics associated with learning disabilities. Nevertheless, large bodies of research have identified common characteristics of the learning disabled including: perceptual-motor impairment, disorders related to memory and thinking, distractibility, impulsivity, emotional immaturity, poor motivation and self-concept, deficiencies in basic academic skills, and neurological weaknesses often referred to as "soft signs" of the disability (McKinney, 1982). This still leaves quite a mixed sample of children who all show various kinds of academic deficits to be labelled learning disabled Learning disabled children have been differentiated from the mentally retarded and the slow learner on the basis that the latter display overall deficits in cognitive functioning, while the former display a specific disability which interferes with their ability to learn while maintaining at least average overall ability.

Theories which attempted to explain learning disabilities in terms of a single or unitary cause, such as perceptual-motor impairment or linguistic deficits, have generally failed to explain the diversity that is formed in the population currently classified as "learning

disabled" in the schools. Some researchers, therefore, have advocated models based on various subgroups within the general category of learning disability. Usually this identification has been made on the basis of patterns of performance across various measures.

At least three groups are generally found. They are frequently identified as those who demonstrate a perceptual impairment, language or linguistic impairment, or attention deficit. By examining the efficacy of identification of subgroups, studies which attempt to show the predictive validity of screening tests may prove helpful both practically and theoretically. Keogh and her colleagues agree that, "from a clinical perspective alone the need for powerful and differential analyses for learning disabilities is urgent. From a theoretical perspective, clarification of subgroups may provide information of more enduring scientific value" (Keogh-Kingsley, Omori-Gordon, & Reed, 1982, p. 72).

The purpose of the current study was to predict from theoretical criteria the subsequent placement of children in programs for specific learning disabilities programs by analysis of patterns of subtest scores. Children with significant scatter or significantly lower scale scores on either the gross motor patterning, visual-perceptual-motor, or language subtests relative to their total scale score on the Meeting Street were predicted to be placed more frequently than others in a program for the learning disabled. Entering first graders were administered the Meeting Street School Screening Test for two

successive school years. Later placement in a learning disabilities program as fourth and fifth graders was used as a criterion to judge the accuracy of prediction of the Meeting Street School Screening Test.

It was hypothesized that scatter analysis of the subtest scale scores on the Meeting Street School Screening Test given at the beginning of first grade would prove to be a more accurate method of predicting future placement in a learning disabilities program than would use of the suggested cut-off total raw score suggested in the Meeting Street School Screening Test manual.

The rationale for this hypothesis is based on the idea that since each subtest has some empirical evidence to suggest it is an early precursor of learning disability, a significant weakness on any subtest of the Meeting Street School Screening Test representing particularly poor performance relative to other subtest scores would be the best predictor of later learning problems. It was believed that the cut-off suggested in the Meeting Street manual would prove to be more effective in identifying children who are at high risk for failure in school than in identifying those children who would later be classified as learning disabled

The Meeting Street School Screening Test (Hainsworth & Siqueland, 1969) is a screening test specifically designed to identify learning disabilities. It is based on an information processing model which closely resembles the neuropsychological model proposed by Osgood (1957). The test is individually administered and takes about 15 to 20

minutes. It has three subtests: motor patterning, visual-perceptual-motor, and language which yield scale scores. Cut-off scores based on raw score points are given in the manual for children in kindergarten and first graders. Children below the cut-off points are considered at risk for learning problems. The Meeting Street School Screening Test has been shown to be a valid predictor of end-of-year first grade reading achievement (Swanson, Payne , & Jackson, 1981). In addition, one study found that it was appropriate for use with minority group children (Federici, Sims, & Bashian, 1976). Information on reliability and internal validity provided in the manual is meager, however.

Method

Subjests

Subjects for this study were all beginning first graders (excluding those who had been retained in the second year of the study to avoid duplication of subjects) in a county school system. There were 1377 all of whom had been administered the Meeting Street School Screening Test during September and October of 1979 and 1980. The subjects were generally representative of the population of the county which contains a mid-sized city and several smaller, rural towns. The sample was 52% male and 48% female. The average age of the children was six and one-half years. Fifty-three percent of the sample was white, while 45% was black with 2% being classified as "other". A range of socioeconomic levels was represented. Approximately one-third of the students within the county qualified for a free lunch program.

A second sample consisting of 100 subjects who were first graders during the year previous to the years when the main subject pool were first graders was used to compute the internal consistency of the Meeting Street School Screening Test. It was necessary to use these subjects because the actual protocols were not available for the main subject pool (only subtest scale scores and total raw scores).

Design

The present study is a multiple validation study of alternative methods of prediction of placement at first grade in a learning disabilities program and in special education programs as a whole.

Materials

This study focused on the predictive validity of the Meeting Street School Screening Test (Hainsworth & Siqueland, 1969). The test was developed at the Meeting Street School diagnostic clinic in Providence, Rhode Island. Items for the test were largely drawn from clinical experience. For the sake of brevity, the test will be referred to as simply the "Meeting Street" for the remainder of this report. The Meeting Street was designed to help educators screen for learning disabilities by surveying the psychoneurological skills that are typically viewed by psychologists and educators as deficient in learning disabled children (Hainsworth & Siqueland, 1969). The authorsstate that the test is based on an information processing model similar to the psycholinguistic model proposed by Osgood (1957) in that it is designed to tap three major information processing modalities: intake (decoding), integration (association), and output (encoding).

The authors also attempt to incorporate the construct of psychoneurological inefficiency as advanced by Myklebust and by Luria (Hainsworth & Siqueland, 1969). The authors do not address how these three approaches are integrated in the test. The Meeting Street is designed for use with children in both kindergarten and first grade. It is an individually administered test which takes about 15 to 20 minutes to give. The test has three subtests, the motor patterning scale, the visual-perceptual-motor scale, and the language scale, which are administered in that order. The standardization sample of the Meeting Street consisted of 500 kindergarten and first grade students ranging in age from 5-0 to 7-5. Equal numbers of girls and boys were used across an even socioeconomic distribution. The sample was taken mainly from the regular school population of East Providence, Rhode Island. No information is available regarding the racial composition of the norming subjects. Field tests of the Meeting Street suggested that scores of 39 raw score points for kindergarten and 55 raw score points for first grade were appropriate cut-off points for determining high risk of learning disability. Raw score points can be linearly transformed into scale scores using tables provided in the back of the manual.

No information concerning the internal reliability of the Meeting Street is reported in the manual. The reliability coefficient of the total Meeting Street on test-retest (two to four weeks apart) is .85 and the same correlations for the subtests range from .75 to .85. Inter-rater reliability coefficients (two raters scoring the same child at the same time) are consistently above .95 for all four scores.

Validity studies presented in the manual indicate significant relationship to other perceptual-motor and language tests. Concurrent validity studies reported in the manual found that total and subtest raw scores of the Meeting Street correlated with the Illinois Test of Psycholinguistic Ability (ITPA) and the Frostig Developmental Tests of Visual Perception (Gavino, 1968).

Procedure

The total Meeting Street raw scores, subtest scale scores, and total scale scores of all beginning first graders in the school district for the 1979 and 1980 school years were collected. The Meeting Street was administered in September and October of these years by the children's classroom teachers. They had been trained to give the Meeting Street in workshops given by a certified school psychologist familiar with the test. An effort was made in all schools to standardize test procedures. Information on the race, sex, and age of each child was also collected at that time.

In the Fall of 1983, a representative of the district identified those children who had subsequently been placed in the learning disabilities program, mildly mentally handicapped program, and the behavior disorders program. A listing of the children's scores, their demographic data, and their current placement was provided by the district without identifying any of the children involved. Children who were in the learning disabilities program were placed there as a result of a complete psychoeducational evaluation by a certified school psychologist or psychometrist, a joint assessment by a regular teacher,

learning disabilities specialist, and psychologist, and the decision ofa placement committee after a careful review of all information. The average child who was placed in an LD program was given an individually administered intelligence test, a visual-perceptual-motor test, some projective testing, individual achievement testing with at least two instruments, and formal or informal language assessment. In addition, a series of classroom observations, a behavior rating scale, developmental questionnaire, and review of classroom work samples were completed prior to placement. Placement decisions were based on this information. Placement into the mildly mentally handicapped or behavior disorders program followed a similar psychoeducational evaluation. The Meeting Street was not used as part of the placement procedure in any way.

The predictive validity of the Meeting Street was assessed using several alternative strategies. Patterns of significantly low subscale scores as well as the suggested cut-off point recommended in the manual were used to predict later placement in a learning disabilities program and judged against the criterion of actual placement. This procedure was repeated for all students placed in any special education program.

Analysis

Initially, it was necessary to devise a method by which significant strengths or weaknesses on subtests relative to a child's average score on the subtest could be noted. This allowed an ipsative analysis which was used to predict later LD placement. Therefore, step 1 in the data analysis was to establish the standard error of the measure for the total test (Meeting Street) and for each of the

subtests using a sample of 100 protocols taken from a pool of tests administered in the year prior to the years of the study. From the results of this analysis, it was possible to create an interval around the child's average score. Scores outside this interval were considered significantly different from the child's average.

Step 2 in the analysis consisted of a procedure to test the hypotheses of interest. Each subject was classified as potentially learning disabled using two approaches: 1) significant scatter on the subtests relative to the average of the total scale score, and 2) the Meeting Street manual's suggested cut-off point (a total raw score of 55 or below for first graders). The classification arising from each approach were crosstabulated with the criteria (actual placement in a learning disabilities program). A Chi square test of association was conducted to compare the effectiveness of scatter analysis versus use of the suggested cut-off to predict later LD placement. Each subject was next classified as potentially in need of some special education service (learning disabled, behavior disordered, or mildly mentally handicapped) according to the cut-off suggested in the Meeting Street manual. The classifications arising from this approach were then crosstabulated with the criteria of actual placement in any special education program.

Results

Before reporting results relevant to the hypotheses of the study, the results of preliminary analyses regarding the internal consistency of the Meeting Street will be presented. The coefficient alpha for the

total scale was .87. The coefficient alpha for each subscale follows: Gross motor patterning, .73, visual-perceptual, .63, and language, .77. These reliability coefficients are within the range considered generally acceptable.

In order to establish when a subtest scale score could be considered to have significant deviation from the subject's average scale score, the standard error of the measure for each subtest and the total test were computed. The standard error of the difference between each subtest and the total scale was also computed to determine if any significant difference existed between the standard errors of the measure among the subtests. No meaningful differences were found between the standard errors of the differences. Therefore, a value of 2.5 was adopted as the general standard error of the measure of the subscales. The standard error of the measure adopted (2.5) was first converted to scale score points and then rounded, yielding an interval of + or - 2 around an individual's scale score average to determine significant subtest scatter.

The first hypothesis stated that using significant scatter on the Meeting Street to predict later placement in a learning disabilities program would be more accurate than using the recommended cut-off point of raw scores below 55 to predict later LD placement. Table 1 presents the results of the first analysis.

Place Table 1 about here

Only 42% of the children later placed in LD programs were correctly identified. Thirty-four percent of children who were not served in a special education program were predicted to be placed in learning disabilities programs.

Tables 2 and 3 present results of analyses examining the effectiveness of scatter analysis to predict LD placement and the use of the raw score cut-off of 55 as a predictor.

Place Table 2 about here

Place Table 3 about here

Using the raw score cut-off of 55 suggested in the manual proved to be a more effective method than scatter analysis for identifying children later placed in an LD program. Use of the raw score cut-off point resulted in identification of 88% of children later placed in learning disabilities programs, while only 42% of learning disabled children were identified correctly through scatter analysis. The number of false negatives were lower with the former method, while the number of false positives were higher (54% of total versus 32% of the total). A Chi square test of association showed that scatter analysis predicted correctly only as many placements as would have been predicted by chance, while use of the recommended cut-off predicted better than chance. Over 90% of children predicted by both methods to be placed

into learning disabilities programs were incorrectly identified as scatter analysis proved to be such a poor predictor of LD placement no further analysis was conducted to determine which subtest was the best predictor. For practical purposes, all were extremely poor predictors. The amount of scatter found in all groups of children with scores below the cut-off was not substantially different.

Part of the initial hypothesis also concerned the appropriateness of the Meeting Street as a screener of generally poor readiness for the first grade rather than as a specific screening instrument for learning disabilities. Combined data in Table 4 indicate that use of the recommended raw score cut-off point of the Meeting Street is as effective in predicting placements in other special education programs as it is in predicting learning disabilities placement.

Place Table 4 about here

Use of the raw score cut-off point to predict placement in a special education program correctly predicted 90% of children so placed. The number of false positives was reduced (57% of the total versus 51% of the total) when the criteria was broadened to include all special education categories and not solely placement in a learning disability program. False negatives remained very low (1% of the total).

Discussion

The Meeting Street as a Predictor of Learning Disabilities Placement

The central hypothesis of this study concerned the use of significant scatter among the subtests of the Meeting Street School Screening Test to predict later placement of children in public school learning disabilities programs. Since delays in the area tapped by each subtest (gross motor patterning, visual-perceptual, and language) are associated with later learning disabilities it was believed that a significantly low score in one of these areas would be a good predictor of a learning disability. Children who were slow learners or mildly retarded were not expected to show significant patterns of strengths or weaknesses relative to their average score. It was hypothesized that scatter analysis would be a more accurate method of predicting later LD placement than would the recommended total raw score cut-off in the Meeting Street manual. Use of the raw score was believed not to discriminate between children who were slow learners, who were mildly mentally handicapped, who were underachieving because of behavior problems, and children with learning disabilities. Current research regarding the existence of subtypes (groups who display similar types of learning styles and academic problems) within the broad rubric of learning disabilities suggests that subtypes based in language processing problems, perceptual problems, and spatial problems exist. The ability of low subtest scores relative to a child's average score on the Meeting Street to predict later LD placement could lend support to the existence of subtypes based in particular kinds of deficits (such as language or perceptual processes).

The main hypothesis regarding the use of scatter to predict later LD placement was not supported. The use of scatter was found to predict LD placement no better than chance. Likewise, the results do not offer support to theories which suggest the existence of subtypes of learning disabilities in young children. Instead, the results indicate that among this sample of first graders extreme variability of subtest scores was as likely to occur among children who were not subsequently placed in special education, children who were placed in programs for the mildly mentally handicapped, and those placed in programs for children with behavior disorders, as it was to occur among children later placed in learning disabilities programs. Over half the children in each of these groups displayed significant subtest scatter.

The Meeting Street was found to identify those at risk for later placement in any special education program rather than those at risk for placement in a learning disabilities program in particular. Use of the suggested raw score cut-off of 55 correctly predicted 90% of children who were later placed in special education programs with few false negatives (1% of the total). While the use of the cut-off proved to be a more effective means of identifying children later placed in LD programs than did scatter analysis, the test was shown not to discriminate between LD children and those with mental or emotional handicaps. By using the Meeting Street's recommended cut-off score to predict children who were at risk for later placement in any special education program rather than only LD programs, the number of false positives was reduced by 6% of the total.

Implications for Subtype Theories of Learning Disabilities

While establishing a total raw score cut-off point to identify children at high risk for placement in a learning disabilities program with the Meeting Street was somewhat successful, the use of significant scatter to identify children later classified as learning disabled in public school programs was unsuccessful. Despite current theory which indicates that learning disabled children typically display specific strengths and weaknesses relative to their overall ability, the current study found that about the same percentage of children not placed in special programs and children placed in special education programs rather than LD programs had significant scatter on the Meeting Street. Why are the results of this study at variance with prevailing theory and research that suggests the existence of specific patterns of strengths and weaknesses and different subtypes of learning disability? Several explanations merit discussion.

Many of the studies which identify different subtypes of learning disability based on differential patterns of performance on psychometric measures have used either much longer individual measures (such as the WISC-R) or batteries of tests which measure language, perceptual, memory and motoric abilities separately. Thus, it may be that the use of a brief measure designed as a screening test was not appropriate for the identification of significant scatter due to the lowered reliability of each measure. A more thorough measurement of an individual's ability may be necessary to establish a true pattern of significant strengths and weaknesses. The Meeting Street, while able

to give a global indication of school readiness, may not be comprehensive enough to provide a definitive statement about ipsative strengths and weaknesses. The subscales of the Meeting Street did correlate well, however, with similar measures of visual-motor skill and language skills such as the Frostig and ITPA (Gavino, 1968). Fish and Rourke (1983) caution that before an assessment can present a meaningful picture of the learning disabled child's abilities and deficits it must contain enough of the relevant variables for subtyping to proceed accurately. It may be a mistake to attempt to identify lasting patterns of performance on the basis of a screening instrument. The day to day variability of young children and the tendency for extreme scores to return to the mean may have clouded the results of the current study.

A second factor which may explain discrepant findings between this study and other studies which have identified subgroups of learning disabilities, may be that the sample of the present study was composed of all entering first graders over a two year period not a previously identified or client-referred sample of learning disabled children. Thus, comparison groups (children not classified as special education students, behaviorally disordered students, and mildly mentally handicapped students) were available in this study which were not available in many other studies. The present study did find that a majority of students later identified as learning disabled had significant scatter among skills measured on a first grade screening test. However, because comparison groups existed this finding does not

appear to be important as significant scatter was found in all groups. The failure of previous studies to examine the performance of children other than their learning disabled sample may explain the differential findings of this study with other research.

Finally, the presence of significant scatter in all the children may be a function of the age of the children. It is difficult to identify learning disabilities in preschool, kindergarten, and first grade children because it is difficult to differentiate among the many probable causes of developmental delay or academic failure. Among these are immaturity, cultural deprivation, lack of exposure, and uneven neurophysiological development. Young children characteristically display uneven patterns of development within an overall level of functioning. Even children who show general developmental delay often show a pattern of strengths and weaknesses when language, motor, and adaptive skills are assessed. This study represented an attempt to identify learning disabilities at the beginning of formal schooling; the results instead confirm the difficulty of separating those children with learning disabilities from those whose academic problems are due to a host of other reasons.

Early identification can only be successful when assessment is helpful in finding those children who need help without excluding those who need help because of artificial cut-off points. Keogh (1977) argues for the development of programs to fit the needs of high risk pupils. The results of the present study indicate that attempting to differentially categorize students into specific categories (learning

disabled, behaviorally disordered, mildly mentally handicapped) on the basis of a screening test is perhaps not nearly so valid as predicting those at risk for academic problems in the short run. Instead of attempting to find the "learning disabled" students upon school entrance, schools would make a wiser choice in identifying those who are at risk and designing noncategorical programs which meet the needs of those children in the early primary grades.

At issue is also the different purposes that public schools and researchers have in identifying children with learning disabilities (Keogh, 1983). While researchers strive to identify and understand the nature of the elusive problem of learning disabilities, schools need to serve those children who are having difficulty learning (even if they do not possess all the characteristics of the "classic" learning disabled child, ill-defined as this term is). It becomes more important for the school to provide services than to classify the particular nature of a learning problem. Federal and state regulations force schools to fit into categories in order to receive special services, often excluding many children who don't fit into a category but who need help. Avoiding this dilemma in identifying and remediating the problems of preschoolers and young children at risk for academic failure is crucial to success.

Further research suggested by the present study falls into two general areas. One line of research should concentrate on broadening the findings of this study regarding the efficacy of the Meeting Street in identifying children who will have problems academically. The criteria by which successful identification is judged should be

broadened to include not only placement in a special education program, but participation in remedial programs such as Chapter I reading programs, retention in first grade, and other indications that the child experienced difficulty.

The effect on the predictive validity of the Meeting Street achieved by combining it with other measures such as a screening ability test, a language screener, or a behavioral rating checklist is another fruitful area of research. A series of studies attempting to refine a particular screening battery so as to achieve an increasingly accurate hit rate of prediction while minimizing the time and resources spent in the screening process would be very valuable.

Similarly, research comparing differences between the performances of girls and boys on the Meeting Street as a whole and between their performances on particular subscales would be interesting. Also, because the presence of specific patterns of performance across all groups of children studied suggest that significant subtest scatter may be developmentally related, studies comparing subtest scatter of the same group of children across different ages would be helpful in determining the presence of subtypes of learning disability in young children. This same type of longitudinal study with other instruments as well as the Meeting Street would be even more helpful in addressing this question.

Table 1

Crosstabulation of Children Predicted to be Placed in Learning Disabilities Program Using Significant Scatter on the Meeting Street by Special Education Classification

Classification	Not Predicted LD (No Significant Scatter)	Predicted LD (Significant Scatter)
No Sp. Ed. Placement	788	411
Mildly Mentally Handicapped	26	13
Behavior Disordered	36	22
Learning Disabled	47	34

Table 2

Crosstabulation of Actual and Predicted Placement in a Learning Disabilities Program by Scatter Analysis of the Subscales of the Meeting Street

	Predicted LD (Significant Scatter)	Not Predicted LD (No Significant Scatter)
Actual LD Placement	34 (2.5%)	47 (3.5%)
No Placement	446 (32%)	850 (62%)

Chi-Square = 1.84

Critical Value = 3.841

Alpha = .05

Table 3

Crosstabulation of Actual and Predicted Placement

in Learning Disabilities Program by

Raw Score Cut-off (<55) on the Meeting Street

	Predicted LD (< cut-off)	Not Predicted LD (≤ cut-off)
Actual LD Placement	71 (5%)	10 (1%)
No LD Placement	787 (57%)	509 (37%)

Chi-Square = 23.81

Critical Value = 3.841

Alpha = .05

Table 4

Prediction of Special Education Placement by Raw Score Less than 55 on the Meeting Street

	Predicted Special Education (≤ cut-off)	Not Predicted Special Education (≤ cut-off)
Actual Special Placement	161 (12%)	17 (1%)
No Special Education Placement	697 (51%)	502 (36%)

References

Federici, L., Sims, H., & Bashian, A. (1976). Use of the Meeting Street School Screening Test and the Myklebust Pupil Rating Scale with first grade black urban children. Psychology in the Schools, 13, 386-89.

Fisk, J. L., & Rourke, B. P. (1983). Neuropsychological subtyping of learning disabled children: History, methods, implications. Journal of Learning Disabilities, 16, 529-531.

Gavino, Purito. (1968). Validation of the Meeting Street School Screening Test. Unpublished masters thesis, Queens University, Ontario, Canada.

Hainsworth, P. K., & Siqueland, M. L. (1969). Early identification of children with learning disabilities: The Meeting Street School Screening Test. Providence, R.I.: Crippled Children and Adults of Rhode Island, Inc.

Jarman, R. P. (June, 1978). Development and validation of cognitive screening instruments. Paper presented at the World Congress on Future Special Education, Stirling, Scotland.

Keogh, B. (1977). Early identification, selective perception or perceptive selection? Academic Therapy, 12, 267-74.

Keogh, B. (1983). Classification, compliance, and confusion. Journal of Learning Disabilities, 16, 25.

Keogh, B., Major-Kingsley, S., Omori-Gordon, H., Reed, H. P. (1982). A system of marker variables for the field of learning disabilities. Syracuse, N.Y.: Syracuse University Press.

McKinney, J. D. (1982). The search for subtypes of specific learning disability. Journal of Learning Disabilities, 43-49.

Osgood, C. E. (1957). Contemporary approaches to cognition. Cambridge, Mass.: Harvard University Press.

Swanson, B., Payne, D., & Jackson, B. (1968). A predictive validity study of the metropolitan readiness test and Meeting Street School Screening Test against first grade metropolitan achievement test scores. Educational and Psychological Measurement, 41, 575-78.